

Date: Tue, 12 Apr 94 09:12:29 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #409  
To: Info-Hams

Info-Hams Digest                    Tue, 12 Apr 94                    Volume 94 : Issue 409

Today's Topics:

    6 meters  
    ARLP014 Propagation de KT7H  
    Green Card Lottery- Final One?  
    Modem chip wanted!  
    QSL route  
    Rise-Set Times 4/12  
    RS Sale on Handhelds ????  
    SAREX QSO Opportunities  
    WWV Antennas

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Tue, 12 Apr 1994 13:30:11 GMT  
From: newsgate.melpar.esys.com!melpar!phb@uunet.uu.net  
Subject: 6 meters  
To: info-hams@ucsd.edu

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>You could build a high level transverter using \*tubes\*. There are  
>designs in old Handbooks. Otherwise you're going to have to build  
>a power attenuator to get the 725 output down to a level where it  
>can drive available solid state transverters. (The 735 has transverter  
>jacks, one of the reasons I chose it.)

>I've seen downconverting designs for 6 meters that used a 2 meter

>multimode rig as the driver in some of the European manuals. That's  
>a viable approach for \*FM\* with your W2A. But you probably really  
>want SSB capability on 6.

>Let me suggest that you start small. Build a receiving converter  
>for 6 meters and listen for a while. If you like what you hear,  
>then build a transmitting converter too.

Good advice, but one caution: The IC-735 transverter output is only about 60 mV, or around -10 dBm. Some of the transverter designs I've seen (and kits as well, such as from DownEast Microwave) require 1 mw of input (0 dBm) which is about 225 mV rms. Check the design carefully to see if there is an input pad which can be removed, or if a low-level stage can be added as an option (DownEast has indicated that they will do this on their 6/2/220 MHz transverter kits).

Ten-Tec has a new 6-meter transverter kit coming available soon which will accept up to 5 w. of input drive and give 8 w. out on 6 meters; IF is 14 MHz. Kit cost is \$95; call and ask for their kit catalog (615-453-7172). Also available assembled for about \$160.

(|\_|) \* Paul H. Bock, Jr. K4MSG \* Internet: pbock@melpar.esys.com  
|\_| \* Senior Systems Engineer \* Telephone: (703) 560-5000 x2062

"You can have my bug when you can pry my cold, dead fingers from around it....." - anonymous radiotelegraph operator

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Date: Sat, 9 Apr 1994 18:57:06 -0600  
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!library.ucla.edu!news.mic.ucla.edu!  
unixg.ubc.ca!nntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.edu  
Subject: ARLP014 Propagation de KT7H  
To: info-hams@ucsd.edu

SB PROP @ ARL \$ARLP014  
ARLP014 Propagation de KT7H  
ZCZC AP28 QST de W1AW Propagation Forecast Bulletin 14  
ARLP014

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Date: 12 Apr 1994 08:13:47 GMT  
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!swrinde!emory!europa.eng.gtefsd.com!  
paladin.american.edu!hookup!news2.sprintlink.net!news.sprintlink.net!indirect.com!  
nike@network.ucsd.edu  
Subject: Green Card Lottery- Final One?  
To: info-hams@ucsd.edu

Green Card Lottery 1994 May Be The Last One!  
THE DEADLINE HAS BEEN ANNOUNCED.

The Green Card Lottery is a completely legal program giving away a certain annual allotment of Green Cards to persons born in certain countries. The lottery program was scheduled to continue on a permanent basis. However, recently, Senator Alan J Simpson introduced a bill into the U. S. Congress which could end any future lotteries. THE 1994 LOTTERY IS SCHEDULED TO TAKE PLACE SOON, BUT IT MAY BE THE VERY LAST ONE.

PERSONS BORN IN MOST COUNTRIES QUALIFY, MANY FOR FIRST TIME.

The only countries NOT qualifying are: Mexico; India; P.R. China; Taiwan, Philippines, North Korea, Canada, United Kingdom (except Northern Ireland), Jamaica, Dominican Republic, El Salvador and Vietnam.

Lottery registration will take place soon. 55,000 Green Cards will be given to those who register correctly. NO JOB IS REQUIRED.

THERE IS A STRICT JUNE DEADLINE. THE TIME TO START IS NOW!!

For FREE information via Email, send request to  
[cslaw@indirect.com](mailto:cslaw@indirect.com)

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Canter & Siegel, Immigration Attorneys  
3333 E Camelback Road, Ste 250, Phoenix AZ 85018 USA  
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Date: Tue, 12 Apr 1994 12:59:07 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!EU.net!Germany.EU.net!netmbx.de!  
zrz.TU-Berlin.DE!cs.tu-berlin.de!math.fu-berlin.de!andrei@network.ucsd.edu  
Subject: Modem chip wanted!  
To: info-hams@ucsd.edu

Hi all!

Does anyone have a Rockwell chip, pin-compatible with RC224AT/1, but more advanced, for sale? I would like that it have V.23 standard and some fax

capabilities.

Thanks,

Andrew Yakovlev.

PS. Please e-mail: andrei@labomath.univ-orleans.fr

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Date: 12 Apr 94 15:03:31 GMT  
From: sdd.hp.com!sgiblab!pacbell.com!sjhawk2@hplabs.hp.com  
Subject: QSL route  
To: info-hams@ucsd.edu

Steve,

I still have a bug in that I cannot post to usenet.  
Would you mind putting one out to get an address for V21AS.  
Everyone says that's where to QSL V26AS, but V21AS is not  
in the Callbook. The information below is even stranger!!!  
Thanks.

Frank

>  
> V21AS  
> V21AS > PIRATE OPERATION, INFO FROM N3PM  
> UPDATED BY DL1SBF: 6-OCT-1992 1915Z  
>  
> V26AS  
> V26AS VIA V21AS  
> UPDATED BY DL1SBF: 5-MAR-1993 1827Z  
>  
> V63SD not found in database  
>  
> OM5A not found in database  
>  
>

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Frank M. Berghuis  
Operator Services Systems Technology  
E-mail: fmbergh@snfc430.pacbell.com  
Voice: (510) 823-1037  
Fax: (510) 275-9618

Page: (510) 630-0660

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Date: 12 Apr 94 14:54:53 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Rise-Set Times 4/12  
To: info-hams@ucsd.edu

SB SAREX @ AMSAT \$STS-59.012  
STS-59 Eastern R/S Times 04/12

Below are the rise and set times for STS-59 for selected US cities over the next three days. This data was generated to help hams without orbit programs to participate in the SAREX activities. Please note that the times shown are UTC and NOT LOCAL TIME. This listing includes only those passes with an elevation greater than 5 degrees. For information regarding SAREX frequencies and operations procedures, check your local PBBS, or bulletins from W1AW, W5RRR, W6VIO or WA3NAN.

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set = time that shuttle disappears below horizon  
el = maximum elevation above horizon  
geo = geometry: A = Ascending orbit, moving south to north  
D = Descending orbit, moving north to south  
E = passes east of observer  
W = passes west of observer

New York City      STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	09:56:15	10:00:03	10:03	71	A-E	65
13Apr94	11:29:25	11:32:24	11:34	7	A-W	66
13Apr94	16:08:53	16:12:11	16:14	9	D-E	69
13Apr94	17:40:28	17:44:20	17:47	40	D-W	70
14Apr94	09:37:46	09:41:34	09:44	85	A-W	81
14Apr94	11:11:04	11:13:58	11:16	6	A-W	82
14Apr94	15:50:22	15:53:44	15:56	10	D-E	85
14Apr94	17:22:01	17:25:51	17:29	33	D-W	86
15Apr94	09:19:16	09:23:04	09:26	75	A-W	97
15Apr94	10:52:43	10:55:30	10:57	6	A-W	98
15Apr94	15:31:49	15:35:15	15:38	11	D-E	101

15Apr94	17:03:32	17:07:20	17:10	28	D-W	102
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## Washington D.C. STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	09:55:33	09:59:20	10:02	60	A-E	65
13Apr94	11:28:46	11:31:39	11:34	6	A-W	66
13Apr94	16:09:14	16:11:55	16:14	5	D-E	69
13Apr94	17:40:22	17:44:17	17:47	76	D-E	70
14Apr94	09:37:04	09:40:51	09:44	76	A-E	81
14Apr94	11:10:27	11:13:13	11:15	5	A-W	82
14Apr94	15:50:41	15:53:29	15:55	5	D-E	85
14Apr94	17:21:54	17:25:48	17:29	84	D-W	86
15Apr94	09:18:33	09:22:21	09:25	84	A-W	97
15Apr94	10:52:06	10:54:45	10:56	5	A-W	98
15Apr94	15:32:06	15:35:01	15:37	6	D-E	101
15Apr94	17:03:24	17:07:17	17:10	69	D-W	102

## Atlanta, GA STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	09:53:35	09:57:19	10:00	37	A-E	65
13Apr94	11:26:51	11:29:31	11:31	5	A-W	66
13Apr94	17:40:52	17:44:10	17:46	9	D-E	70
13Apr94	19:12:31	19:16:07	19:19	16	D-W	71
14Apr94	09:35:04	09:38:49	09:42	46	A-E	81
14Apr94	17:22:19	17:25:43	17:28	10	D-E	86
14Apr94	18:54:07	18:57:38	19:00	14	D-W	87
15Apr94	09:16:32	09:20:18	09:23	60	A-E	97
15Apr94	17:03:45	17:07:14	17:10	12	D-E	102
15Apr94	18:35:41	18:39:06	18:42	12	D-W	103

## Miami, FL STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	09:52:43	09:56:17	09:59	19	A-W	65
13Apr94	19:14:37	19:18:18	19:21	21	D-W	71

14Apr94	09:34:19	09:37:50	09:40	16	A-W	81
14Apr94	17:25:04	17:27:51	17:30	5	D-E	86
14Apr94	18:56:12	18:59:49	19:02	18	D-W	87
15Apr94	07:44:52	07:47:36	07:49	6	A-E	96
15Apr94	09:15:55	09:19:20	09:22	14	A-W	97
15Apr94	17:06:24	17:09:22	17:11	6	D-E	102
15Apr94	18:37:46	18:41:17	18:44	15	D-W	103

Compiled by Dan Schultz, N8FGV

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

Send comments to n8fgv@amsat.org

/EX

SB SAREX @ AMSAT \$STS-59.013

STS-59 Central R/S Times 04/12

Below are the rise and set times for STS-59 for selected US cities over the next three days. This data was generated to help hams without orbit programs to participate in the SAREX activities. Please note that the times shown are UTC and NOT LOCAL TIME. This listing includes only those passes with an elevation greater than 5 degrees. For information regarding SAREX frequencies and operations procedures, check your local PBBS, or bulletins from W1AW, W5RRR, W6VIO or WA3NAN.

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set = time that shuttle disappears below horizon  
el = maximum elevation above horizon  
geo = geometry: A = Ascending orbit, moving south to north  
D = Descending orbit, moving north to south  
E = passes east of observer  
W = passes west of observer

Chicago, IL                    STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	09:55:39	09:58:40	10:01	8	A-E	65
13Apr94	11:26:34	11:30:20	11:33	31	A-W	66
13Apr94	17:38:27	17:42:16	17:45	25	D-E	70
13Apr94	19:10:45	19:14:03	19:16	10	D-W	71
14Apr94	09:37:01	09:40:10	09:42	9	A-E	81
14Apr94	11:08:09	11:11:53	11:15	27	A-W	82
14Apr94	17:19:57	17:23:48	17:27	29	D-E	86
14Apr94	18:52:22	18:55:33	18:58	8	D-W	87

15Apr94	09:18:22	09:21:37	09:24	10	A-E	97
15Apr94	10:49:41	10:53:23	10:56	24	A-W	98
15Apr94	17:01:26	17:05:18	17:08	33	D-E	102
15Apr94	18:33:58	18:37:00	18:39	7	D-W	103

Huntsville, AL      STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	09:53:39	09:57:15	10:00	21	A-E	65
13Apr94	11:26:12	11:29:18	11:31	8	A-W	66
13Apr94	17:40:25	17:43:38	17:46	8	D-E	70
13Apr94	19:11:57	19:15:39	19:18	20	D-W	71
14Apr94	09:35:06	09:38:46	09:41	25	A-E	81
14Apr94	11:07:53	11:10:52	11:13	7	A-W	82
14Apr94	17:21:52	17:25:11	17:28	9	D-E	86
14Apr94	18:53:31	18:57:09	19:00	17	D-W	87
15Apr94	09:16:32	09:20:14	09:23	30	A-E	97
15Apr94	10:49:33	10:52:23	10:54	6	A-W	98
15Apr94	17:03:17	17:06:42	17:09	11	D-E	102
15Apr94	18:35:05	18:38:38	18:41	15	D-W	103

Houston, TX      STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	09:52:02	09:55:12	09:57	9	A-E	65
13Apr94	11:23:42	11:27:02	11:29	11	A-W	66
13Apr94	19:11:43	19:15:30	19:18	25	D-E	71
14Apr94	09:33:24	09:36:42	09:39	11	A-E	81
14Apr94	11:05:21	11:08:34	11:11	10	A-W	82
14Apr94	18:53:13	18:57:01	19:00	30	D-E	87
15Apr94	09:14:46	09:18:10	09:21	13	A-E	97
15Apr94	10:47:00	10:50:05	10:52	8	A-W	98
15Apr94	18:34:40	18:38:30	18:41	37	D-E	103

Denver, CO      STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
------	------	-----	-----	----	-----	-------

13Apr94	11:24:03	11:27:40	11:30	20	A-E	66
13Apr94	12:56:15	12:59:40	13:02	12	A-W	67
13Apr94	19:08:22	19:12:13	19:15	33	D-E	71
13Apr94	20:41:02	20:43:54	20:46	6	D-W	72
14Apr94	11:05:30	11:09:10	11:12	23	A-E	82
14Apr94	12:37:53	12:41:13	12:44	11	A-W	83
14Apr94	18:49:52	18:53:45	18:57	39	D-E	87
14Apr94	20:22:43	20:25:23	20:27	5	D-W	88
15Apr94	10:46:56	10:50:38	10:53	27	A-E	98
15Apr94	12:19:29	12:22:45	12:25	10	A-W	99
15Apr94	18:31:21	18:35:15	18:38	47	D-E	103

Compiled by Dan Schultz, N8FGV

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

Send comments to n8fgv@amsat.org

/EX

SB SAREX @ AMSAT \$STS-59.014

STS-59 Western R/S Times 04/12

Below are the rise and set times for STS-59 for selected US cities over the next three days. This data was generated to help hams without orbit programs to participate in the SAREX activities. Please note that the times shown are UTC and NOT LOCAL TIME. This listing includes only those passes with an elevation greater than 5 degrees. For information regarding SAREX frequencies and operations procedures, check your local PBBS, or bulletins from W1AW, W5RRR, W6VIO or WA3NAN.

Symbol key: rise = time that shuttle appears above horizon

tca = time of closest approach to observer

set = time that shuttle disappears below horizon

el = maximum elevation above horizon

geo = geometry: A = Ascending orbit, moving south to north

D = Descending orbit, moving north to south

E = passes east of observer

W = passes west of observer

Seattle, WA                    STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	12:55:16	12:58:41	13:01	13	A-E	67
13Apr94	14:26:39	14:30:27	14:33	34	A-W	68
13Apr94	15:59:41	16:03:00	16:05	9	A-W	69
13Apr94	17:32:35	17:35:51	17:38	9	D-E	70

13Apr94	19:04:36	19:08:25	19:11	25	D-E	71
13Apr94	20:36:39	20:40:21	20:43	19	D-W	72
14Apr94	12:36:41	12:40:11	12:43	15	A-E	83
14Apr94	14:08:12	14:12:00	14:15	31	A-W	84
14Apr94	15:41:17	15:44:34	15:47	9	A-W	85
14Apr94	17:14:07	17:17:25	17:20	9	D-E	86
14Apr94	18:46:07	18:49:58	18:53	28	D-E	87
14Apr94	20:18:12	20:21:51	20:25	17	D-W	88
15Apr94	12:18:06	12:21:39	12:24	16	A-E	99
15Apr94	13:49:44	13:53:30	13:56	28	A-W	100
15Apr94	15:22:50	15:26:06	15:28	9	A-W	101
15Apr94	16:55:38	16:58:57	17:01	9	D-E	102
15Apr94	18:27:36	18:31:28	18:34	30	D-E	103
15Apr94	19:59:44	20:03:19	20:06	15	D-W	104

Albuquerque, NM      STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	11:22:47	11:26:30	11:29	31	A-E	66
13Apr94	12:55:46	12:58:39	13:01	6	A-W	67
13Apr94	19:09:20	19:12:49	19:15	12	D-E	71
13Apr94	20:41:14	20:44:43	20:47	13	D-W	72
14Apr94	11:04:16	11:08:00	11:11	38	A-E	82
14Apr94	12:37:28	12:40:13	12:42	5	A-W	83
14Apr94	18:50:48	18:54:22	18:57	14	D-E	87
14Apr94	20:22:50	20:26:13	20:29	11	D-W	88
15Apr94	10:45:43	10:49:29	10:52	48	A-E	98
15Apr94	12:19:09	12:21:45	12:23	5	A-W	99
15Apr94	18:32:15	18:35:52	18:39	15	D-E	103
15Apr94	20:04:26	20:07:41	20:10	10	D-W	104

Los Angeles, CA      STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	11:22:16	11:24:58	11:27	5	A-E	66
13Apr94	12:52:58	12:56:38	12:59	22	A-W	67
13Apr94	20:39:33	20:43:26	20:46	53	D-E	72
14Apr94	11:03:34	11:06:27	11:08	7	A-E	82
14Apr94	12:34:34	12:38:10	12:41	19	A-W	83

14Apr94	20:21:04	20:24:57	20:28	68	D-E	88
15Apr94	10:44:53	10:47:55	10:50	8	A-E	98
15Apr94	12:16:08	12:19:41	12:22	17	A-W	99
15Apr94	20:02:33	20:06:26	20:09	85	D-W	104

Honolulu, HI            STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	14:16:46	14:20:31	14:23	83	A-W	68
13Apr94	23:40:51	23:44:28	23:47	17	D-E	74
14Apr94	13:58:18	14:02:02	14:05	62	A-W	84
14Apr94	23:22:18	23:26:00	23:29	21	D-E	90
15Apr94	13:39:49	13:43:31	13:46	46	A-W	100
15Apr94	23:03:44	23:07:29	23:10	26	D-E	106

Compiled by Dan Schultz, N8FGV

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

Send comments to n8fgv@amsat.org

/EX

SB SAREX @ AMSAT \$STS-59.015

STS-59 World R/S Times 04/12

Below are the rise and set times for STS-59 for selected worldwide cities over the next three days. This data was generated to help hams without orbit programs to participate in the SAREX activities. Please note that the times shown are UTC and NOT LOCAL TIME. This listing includes only those passes with an elevation greater than 5 degrees. For information regarding SAREX frequencies and operations procedures, check your local PBBS, or bulletins from W1AW, W5RRR, W6VIO or WA3NAN.

Symbol key:

- rise = time that shuttle appears above horizon
- tca = time of closest approach to observer
- set = time that shuttle disappears below horizon
- el = maximum elevation above horizon
- geo = geometry: A = Ascending orbit, moving south to north
- D = Descending orbit, moving north to south
- E = passes east of observer
- W = passes west of observer

London, England        STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
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13Apr94	05:32:38	05:36:16	05:39	19	A-E	62
13Apr94	07:04:15	07:08:07	07:11	40	A-W	63
13Apr94	08:36:49	08:40:31	08:43	18	D-W	64
13Apr94	10:09:07	10:12:58	10:16	27	D-E	65
13Apr94	11:41:08	11:45:01	11:48	39	D-W	66
14Apr94	05:14:06	05:17:46	05:20	21	A-E	78
14Apr94	06:45:48	06:49:39	06:53	37	A-W	79
14Apr94	08:18:22	08:22:04	08:25	18	D-W	80
14Apr94	09:50:39	09:54:30	09:57	28	D-E	81
14Apr94	11:22:40	11:26:32	11:29	34	D-W	82
15Apr94	04:55:32	04:59:14	05:02	24	A-E	94
15Apr94	06:27:19	06:31:10	06:34	34	A-W	95
15Apr94	07:59:54	08:03:35	08:06	18	D-W	96
15Apr94	09:32:09	09:36:01	09:39	30	D-E	97
15Apr94	11:04:10	11:08:01	11:11	31	D-W	98

Paris, France      STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	05:32:38	05:36:24	05:39	30	A-E	62
13Apr94	07:04:36	07:08:24	07:11	26	A-W	63
13Apr94	08:37:19	08:40:55	08:44	14	D-W	64
13Apr94	10:09:37	10:13:26	10:16	24	D-E	65
13Apr94	11:41:36	11:45:29	11:48	36	D-W	66
14Apr94	05:14:07	05:17:54	05:21	33	A-E	78
14Apr94	06:46:10	06:49:57	06:53	25	A-W	79
14Apr94	08:18:53	08:22:28	08:25	14	D-W	80
14Apr94	09:51:08	09:54:58	09:58	25	D-E	81
14Apr94	11:23:09	11:27:00	11:30	32	D-W	82
15Apr94	04:55:35	04:59:23	05:02	38	A-E	94
15Apr94	06:27:42	06:31:28	06:34	24	A-W	95
15Apr94	08:00:24	08:04:00	08:07	14	D-E	96
15Apr94	09:32:38	09:36:29	09:39	27	D-E	97
15Apr94	11:04:39	11:08:29	11:11	29	D-W	98

Tokyo, Japan      STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	02:51:43	02:55:06	02:58	10	D-E	60

13Apr94	04:23:27	04:27:04	04:30	17	D-W	61
13Apr94	18:47:03	18:50:42	18:53	24	A-E	71
13Apr94	20:19:42	20:22:47	20:25	8	A-W	72
14Apr94	02:33:11	02:36:39	02:39	12	D-E	76
14Apr94	04:05:02	04:08:35	04:11	14	D-W	77
14Apr94	18:28:31	18:32:13	18:35	29	A-E	87
14Apr94	20:01:23	20:04:21	20:06	7	A-W	88
15Apr94	02:14:37	02:18:10	02:21	13	D-E	92
15Apr94	03:46:36	03:50:03	03:52	12	D-W	93
15Apr94	18:09:58	18:13:41	18:16	35	A-E	103
15Apr94	19:43:02	19:45:52	19:48	6	A-W	104

Sydney, Australia STS-59 Element Set GSFC-005

date	rise	tca	set	el	geo	orbit
13Apr94	06:11:32	06:15:12	06:18	29	D-E	62
13Apr94	07:44:35	07:47:20	07:49	5	D-W	63
13Apr94	13:58:44	14:01:51	14:04	8	A-E	67
13Apr94	15:30:16	15:33:50	15:36	18	A-W	68
14Apr94	05:53:01	05:56:42	05:59	36	D-E	78
14Apr94	07:26:18	07:28:54	07:30	5	D-W	79
14Apr94	13:40:10	13:43:24	13:46	9	A-E	83
14Apr94	15:11:51	15:15:20	15:18	15	A-W	84
15Apr94	05:34:28	05:38:11	05:41	46	D-E	94
15Apr94	13:21:36	13:24:55	13:27	10	A-E	99
15Apr94	14:53:26	14:56:49	14:59	13	A-W	100

Compiled by Dan Schultz, N8FGV

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

Send comments to n8fgv@amsat.org

/EX

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Date: 12 Apr 94 14:44:19 GMT

From: ihnp4.ucsd.edu!swrinde!emory!hubcap.clemson.edu!hubcap!

pruitt@network.ucsd.edu

Subject: RS Sale on Handhelds ????

To: info-hams@ucsd.edu

I just received a flyer from RS and their 440 MHz and 2-meter FM transceivers are on sale for \$228 and \$188 respectively. A savings of

approximately \$70 off of regular price.

How do these products rate against others in price and quality? I am new to the HAM world and in the process of studying for my license. Any information on these and other comparable handhelds would be appreciated.

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Date: 12 Apr 94 11:24:17 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: SAREX QSO Opportunities  
To: info-hams@ucsd.edu

SB SAREX @ AMSAT \$STS-59.011  
SAREX QSO Opportunities 4/12

Greenbelt, MD, 4/12/94 at 11:00 UTC

The Shuttle Amateur Radio Experiment (SAREX) school group contacts have been quite successful. At this point, all but one school is complete. The SAREX Working Group will have more details on the success of these schools in later bulletins.

These successful contacts have opened two school backup passes which can now be used for general voice operations. The SAREX Working Group anticipates that the STS-59 crew will be on-the-air during Orbit 56, which covers the western United States, starting around 20:56 UTC on April 12. In addition, the Paltamo, Finland, backup pass will provide hams in the Northern European area the opportunity to work the shuttle. This opportunity is expected to start at 7:08 UTC on April 13 during orbit 63.

As a reminder, the following are the voice uplink and downlink frequencies for SAREX:

Voice Downlink: (Worldwide) 145.55 MHz  
Voice Uplink: 144.91, 144.93, 144.95, 144.97, 144.99 MHz  
Voice Uplink: (Europe only) 144.70, 144.75, 144.80 MHz

Also, the voice call signs are N5QWL and N5RAX

The SAREX Working Group wishes you the best of luck in your efforts to contact the astronauts on the space shuttle Endeavour.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

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Date: 11 Apr 1994 07:04:38 GMT  
From: swrindle!emory!news-feed-2.peachnet.edu!pirates!news-feed-1.peachnet.edu!  
apollo1.cacd.rockwell.com!zodiac.cca.cr.rockwell.com!newsfeed.ksu.ksu.edu!  
moe.ksu.ksu.edu!crcnis1.unl.@@ihnp4.ucsd.edu  
Subject: WWV Antennas  
To: info-hams@ucsd.edu

kennish@kabuki.EECS.Berkeley.EDU (Ken A. Nishimura) writes:

>gain. FM broadcasters do this to put as much power as  
>possible into the horizon. Not much advertising potential high  
>up in the air.....

FM broadcast is not HF. You are correct. There isn't much advertising potential high up in the air. However, on HF, things are different.

You and Jeff are making the same mistake. You are both thinking in the DX frame of mind. If you take away the high angle radiation component of the single element antenna, you take away from those of us who rely on that high angle radiation to get a signal from them at relatively short distance. Again, it serves more to let it be broad. A low angle radiator will certainly do better on the long haul, but will decrease the signal closer in.

Gary-AGON

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Date: (null)  
From: (null)  
This was a terrible week for propagation. There were several days with no visible sunspots, the solar flux was down about ten points from the previous week, and the geomagnetic field was very active. K indices were at four or five most of the time. Probably the worst day was April 3 when the A index was 48.

The K index is updated every three hours, and can be monitored on WWV at 18 minutes after each hour, along with the A index and Solar Flux. The WWV propagation broadcast can also be heard over the telephone any time at 303-497-3235.

The K index is an indicator of stability of the Earth's geomagnetic field. A single point change in the K index

is quite significant. Values below three indicate generally good conditions, while above three means that conditions are difficult. A K index of five is quite bad.

The A index is updated once per day, and is based on the K indices for the previous 24 hours. A one point change in the A index is not very significant. Generally values below ten indicate good conditions, and above ten indicates a poorer outlook.

Look for active geomagnetic conditions to continue for the next week. Solar flux should rise slowly to peak above 100 around April 19 or 20. A indices may not calm down to stable levels until after April 21. Then look for more stormy conditions as old problem areas on the Sun rotate back into view around the end of the month.

Sunspot Numbers from March 31 through April 6 were 61, 28, 0, 0, 0, 11 and 0, with a mean of 14.3. 10.7 cm flux was 85, 82.5, 79.3, 77.4, 77.1, 77.1 and 73.2, with a mean of 78.8.

The path projection for this week is from Salt Lake City to Honolulu.

80 meters looks good from 0430 to 1400z, peaking from 0630 to 1230. 40 meters should be open from 0300 to 1400, with the best conditions from 0500 to 1300. 30 meters should be good from 0100 to 0830 and again from 1600 to 1800. Check 20 meters from 1630 to 0700, with the best period from 0400 to 0630. 17 meters should be open from 1900 to 0330. 15 meters from 2100 to 0000, and on some days as early as 1900 and as late as 0200. 12 and 10 meters do not look good, but on some days 12 meters may be open from 2030 to 0100.

NNNN

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End of Info-Hams Digest V94 #409

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